Otay Ranch Business Park Design Guidelines Villages Two and Three

NOTE: VILLAGE THREE IS NO LONGER A PART OF THESE DESIGN GUIDELINES. FOR VILLAGE THREE REFER TO UNIVERSITY VILLAGES SPA



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THE GENERAL COMPANY

Otay Ranch Business Park Design Guidelines Villages Two and Three

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I. Introduction

A. DESIGN GUIDELINES DOCUMENT

I. Design Guidelines Document

The Otay Ranch General Development Plan (GDP) requires that a Village Design Plan be prepared for each village at the Sectional Planning Area (SPA) level of planning. The Village Design Plan guides planning and development by defining the intended character and design elements of the village. The Otay Ranch Business Park is not an Otay Ranch Urban Village, and as such does not require a Village Design Plan to address complex land use and design issues. Instead, these Design Guidelines are provided as a guide for developers and designers in creating the Business Park and as a design evaluation tool for the City of Chula Vista.

The Otay Ranch Business Park Design Guidelines provide direction for the design of sites, buildings and landscapes within the Business Park to ensure that the quality of the adopted urban design and architectural concepts established for the overall Otay Ranch community are maintained. The Design Guidelines identify a theme for the Otay Ranch Business Park and delineate that identity through streetscape and landscape design, signage programs, and architectural and lighting guidelines.

This introductory section provides a description of the design review process for development within Otay Ranch Business Park. Section II describes the Otay Ranch Business Park setting, land use plan, and the design theme of the village. A description of the Otay Ranch Business Park design compliance with the Otay Ranch GDP is provided in the Appendix.

2. Companion Documents

a. Otay Ranch GDP Overall Design Plan

The guiding framework plan is the Otay Ranch GDP Overall Design Plan. The Overall Design Plan provides general design guidelines appropriate to the pedestrian and transit-oriented village concepts envisioned for the community.

b. Montecito & The Otay Ranch Business Park Planned Community (PC) District Regulations

The PC District Regulations establish land use development standards and appropriate regulations (zoning) for all construction within the project area. All proposed developments must adhere to the land uses, setbacks, building heights and similar regulatory criteria specified in the PC District Regulations.

c. City of Chula Vista Design Manual

The City Design Manual provides design guidelines for commercial and industrial developments. The Manual also outlines the City's design review process.



d. City of Chula Vista Landscape Manual

The City's Landscape Manual addresses overall requirements and approval processes and project landscape requirements. The Manual also includes lists of discouraged and recommended plant lists.

B. DESIGN REVIEW PROCESS

I. Process

Formal design review processes have been established to ensure all development within Otay Ranch is consistent with the City of Chula Vista policies and development standards. Development must conform to the Otay Ranch GDP Overall Design Plan, Otay Ranch Business Park Design Plan and The Otay Ranch Business Park Planned Community District Regulations. The process requires preparation of site, landscape and architectural plans that will be reviewed and approved by the Master Developer, City of Chula Vista Zoning Administrator and City of Chula Vista Design Review Committee, depending on the type and size of proposed project. The various review processes are described in the following sections.

2. Master Developer Review

The Otay Ranch Business Park infrastructure and building lots will be developed by the Master Developer, The Otay Ranch Company. Most of the elements described in Section II of this document, including landform grading, village entries and streets will be implemented by the Master Developer. The development of building sites within the plan area will be by Merchant Builders. A design review process has been created to facilitate development by Merchant Builders within the unique village planning concepts of the Otay Ranch planned community.

The design review process includes two integrated procedures: design review and approval by the Master Developer and review and approval by the City of Chula Vista. The process requires the Merchant Builder to formulate the design for their parcel and review it with the Master Developer prior to formal application and review by the City. The review requirements of the Master Developer are intended to ensure that the builder's intended product and designs meet the standards and criteria for the entire planned community. The items to be included in the Merchant Builder's design submittal package to the Master Developer would typically consist of preliminary site, landscape and architectural plans. Following acceptance of the Merchant Builder's schematic design, a continuing exchange of information will be expected as the design is finalized and the City's review process begins. Final, approved plans shall be provided to the Master Developer. The Master Developer shall provide written approval in writing prior to final approval by the City of Chula Vista.

3. Zoning Administrator Design Review

The Zoning Administrator is authorized to approve applications on several subjects as provided in Section 19.14.030 of the Chula Vista Zoning Code, specifically including: Site, Architectural and Landscape Plan approval. Public buildings of 20,000 square feet or less in size are subject to Administrative Design Review. All proposals shall be consistent with the Montecito and The Otay Ranch Business Park Community District Regulations and these Otay Ranch Business Park Design Guidelines.

4. Design Review Committee

All proposals over 20,000 square feet in size shall be approved through the Design Review Committee approval process. The Design Review Committee shall review plans as required by the Planned Community District Regulations, and as provided herein. They shall base their findings on the City's Design Manuals and this Otay Ranch Business Park Design Guidelines. Refer to Sections 19.14.581 through 19.14.600 of the Zoning Ordinance for additional information.

5. Appeals

An appeal to the Planning Commission on a decision to the Design Review Committee may be filed within ten days after the decision as provided for in Section 19.14.583 of the City's Zoning Ordinance.

II. Plan Area Pesign Guidelines

This section provides general design guidelines and concepts for industrial development to encourage a high level of design quality and creativity. These Plan Area Design Guidelines address the elements that will be implemented by the Master Developer. Those elements include the design of the overall land use plan, grading, slope planting, streets and parkways, village entries, perimeter walls and fencing, lighting and street furnishings.

General Design Objectives:

- Contribute toward reinforcing or establishing a distinct architectural and environmental image for the business park.
- Consider the scale, proportion and character of development in the surrounding area.
- Establish attractive, inviting, imaginative and functional site arrangement of buildings and parking areas and a high quality architectural and landscape design which provides an efficient and pleasant work environment.
- Facilitate and encourage on-site pedestrian activity.
- Minimize excessive or incompatible impacts of noise, light, traffic and visual character.
- Preserve and incorporate access to views into the project development proposal.

A. PLAN AREA DESIGN

The Otay Ranch Business Park plan area is located in the southwestern portion of the Otay Valley Parcel of the Otay Ranch. The village is bounded by the Otay landfill to the west and northwest, Montecito to the north, Wolf Canyon open space to the east and the Otay River Valley open space to the south. Main Street is located along the southern boundary. Heritage Road bisects the Village 3 Portion of Business Park and provides the primary access. In addition, two industrial parcels are within Village Two, north and east of the Otay Landfill.

Unlike the more complex Urban Villages in Otay Ranch, the design of this SPA Plan area is fairly straightforward. The industrial and Business Park land uses require large, level development parcels that can accommodate office and warehouse buildings, outdoor storage areas, truck loading areas and parking for employees and visitors. The street circulation system is designed to accommodate large truck movement throughout the Business Park. Transit stations and sidewalks are integrated into the circulation design to promote the use of public transportation. Landscaping provides the opportunity to unify the development and integrate it into the overall Otay Ranch design theme.

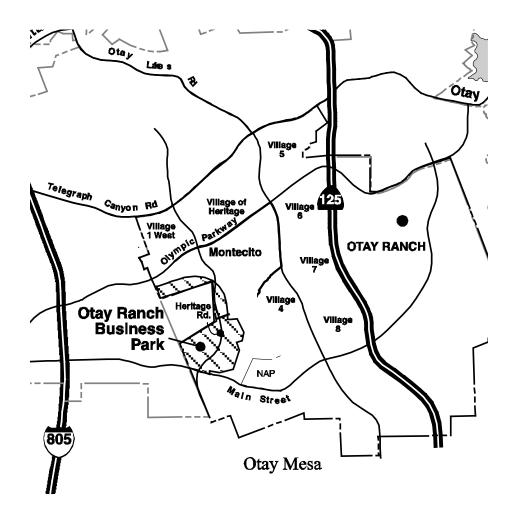


Exhibit I Otay Ranch Business Park Location



Exhibit 2

Otay Ranch Business Park Site Utilization Plan

I. LANDFORM GRADING

The eastern topography of the Business Park within Village Three is generally a ridge that will be lowered to create a series of large, stepped terraces from north to south. The topography of the western area is a moderate slope from northwest to southeast that will also be terraced to create development sites. Heritage Road will be located through the Business Park, descending in grade from the northern area to the intersection with Main Street at the southern border of the development area. The Village Two portion of the Business Park located east of Heritage Road is relatively flat and relates to Heritage Road along its western edge. The Village Two West area is below the landfill and relates to Santa Victoria Road along its northern edge.

The eastern edge of the development area will transition to the Wolf Canyon open spaces to the east. This area will be landform graded in conformance with the City's Municipal Code Grading Ordinance #1797. The manufactured slopes in this area will be planted with native-compatible plant materials to create both an aesthetic and biological transition to the Wolf Canyon natural Preserve area.

The grading plan strives to minimize large and steep manufactured slopes. The design proposes to utilize landform grading techniques and landscaping to minimize the manufactured appearance of slopes. Landform grading will consist of varied or contoured slopes. Both vertical and horizontal undulation will be integrated in the design. Trails and benching, where required, will also contribute to variation in the slope plane. The primary treatment for creating aesthetically pleasing slopes within the village is through landscaping. Manufactured slopes will be planted with varied size trees, shrubs and groundcovers to create undulation on the slope face. Varied tree heights obscure the top of slopes and create skyline interest. Exhibit 3 illustrates both variable and contour grading concepts.

Guidelines to be used for grading and slope design are:

- Create elevation changes within the property that strive for a balance of cut and fill grading.
- Use grade changes to optimize views and a sense of spaciousness.
- Use grade changes between differing land uses where separation and buffering is desired.
- Avoid, wherever possible, creating slopes over 25 feet in height to minimize a sense of enclosure, particularly in residential rear yards.
- Use contour grading techniques, where appropriate on slopes over 25 feet in height.

- Use varied-height trees, shrubs and groundcovers to undulate the surface of the slope, where possible.
- Minimize surface runoff and erosion potential by planting low water consumptive and drought tolerant plants.
- Use state-of the art erosion control, irrigation and water management practices to protect slopes.
- Emphasize and accentuate scenic vistas and natural landforms.

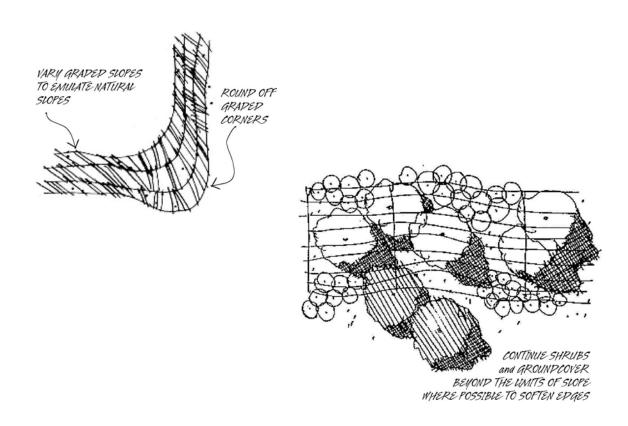


Exhibit 3

Contour Grading Techniques

B. LANDSCAPE DESIGN

Guidelines are provided in this section to assist the Master Developer's landscape architects and contractors in the design and construction process for the planting and irrigation of the village. The Master Developer will implement the village entries, street parkways and slope planting. These guidelines shall be used in conjunction with the Otay Ranch Overall Design Guidelines, the city of Chula Vista Design Manual and Landscape Manual, as well as the appropriate Federal, State, and County codes:

- All landscape and irrigation plans shall be prepared by a licensed California landscape architect and shall be submitted to the City of Chula Vista, and to the Master Developer for review and approval prior to the start of construction. All submissions shall demonstrate compliance with the "Landscape Design and Development Guidelines" section contained herein.
- These guidelines are design concept guidelines only and are not intended to be used for engineering and or construction purposes. It is the responsibility of the project merchant builder to have the appropriate consultants (civil, structural, and geotechnical engineers as well as architects, and landscape architects) to provide the necessary structural details, and specifications for the construction of these fences, walls, monuments or other structures based on the concepts provided herein.

I. Entries

a. Otay Ranch Community Entry

The intersection of Rock Mtn. Road and Heritage Road is an Otay Ranch Community Entry. This entry will be designed to be consistent with the Otay Ranch community theme, including the Otay Ranch stone pilaster, low walls and landscape planted in orderly patterns.

Exhibit 4 illustrates the conceptual design of the entry landscape.

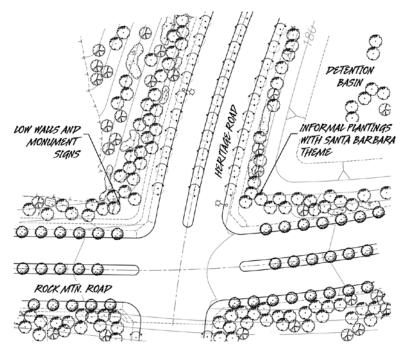


Exhibit 4 <u>Otay Ranch Community Entry</u>

b. Business Park Entries

Business Park entries to the Village Two and Three plan area are created at three intersections on Heritage Road. Slopes along Heritage provide fairly extensive landscape areas for enhanced landscaping and monument signs identifying the Business Park. Access to the Business Park north of the landfill is provided via two intersections on Santa Victoria Road.

The entry landscape will consist of an informal grove of Afghan Pines (Pinus eldarica) that will contrast with the backdrop planting of the slopes behind the entries. Low walls will define the entry areas and provide locations for signage and monuments. Low shrubs and grasses will be planted in the foreground.

Exhibit 5 illustrates the conceptual design of the entry landscapes

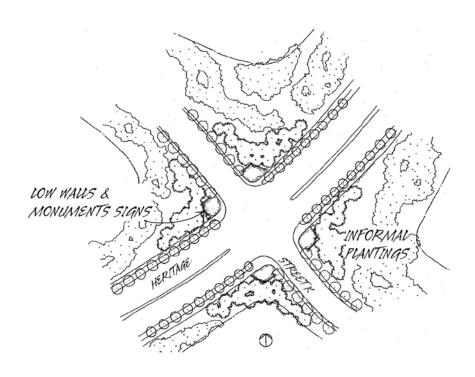


Exhibit 5

Business Park Entry Concept

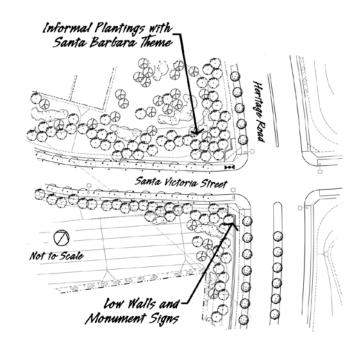


Exhibit 6

<u>Primary Montecito West Entry</u>

Heritage Road

2. Streetscapes

The following are guidelines for street parkway landscapes:

- The location of sidewalks and trees within parkways shall be coordinated to accommodate the mature growth of the street trees.
- Root barriers and deep watering (bubbler) systems shall be used.
- Routine tree pruning and maintenance will be conducted pursuant to City standards. Depending on the location of street trees, pruning activities may be the responsibility of the City, a Community Facilities District or Business Association.

a. Six-Lane Major Arterial Streets

Landscaping shall be compatible with the Otay Ranch design themes. The landscape includes evenly spaced rows (40' on center) of California Pepper trees (Schinus molle) in the parkways and medians.

Exhibit 6 illustrates in cross section and plan view the landscape for a six-lane arterial road.

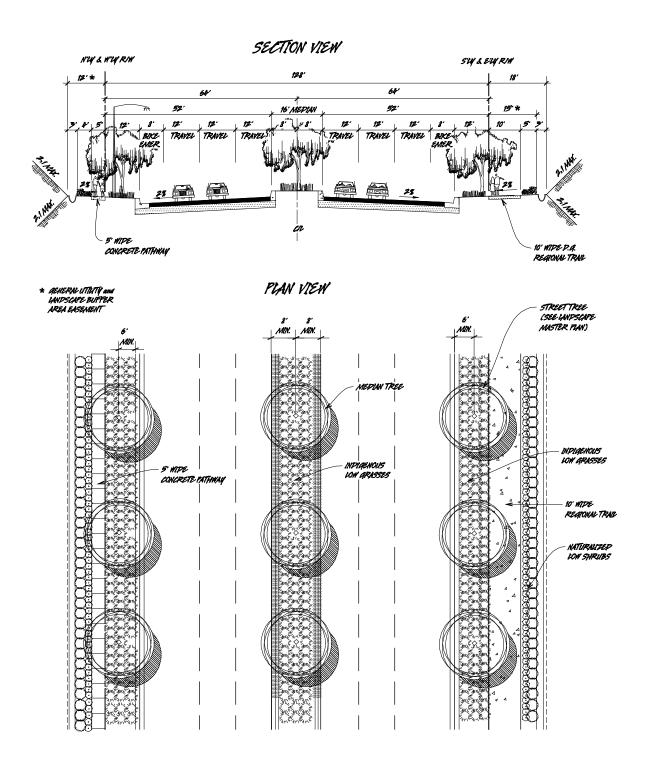


Exhibit 7

<u>Heritage Road/Rock Mountain Road/Main Street</u>

Landscape Concept - Not to Scale

b. Village Industrial (Class II Collector) Streets

The interior circulation streets within the village support the Otay Ranch design themes through the use of selected species of trees, shrubs and groundcovers. Trees planted within the parkway (spaced 30' on center) along these streets are Raywood Ash (Fraxinus agustifolia "Raywood").

Exhibit 7 illustrates in cross section and plan view the landscape of the interior circulation streets.

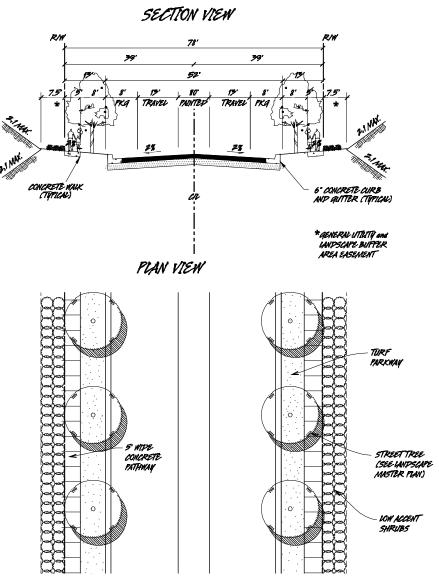


Exhibit 8

<u>Village Industrial Collector Street</u>

Not to Scale

c. Secondary Village Entry

The Secondary Village Entry Street is the primary east-west circulation street through Montecito. This street unifies the varied village land uses with a continuous village theme streetscape. The Village Pathway is the primary circulation route for pedestrian and cart alternative village travel and provides a 15' Village Pathway separate from the roadway. The street design includes travel lanes, parallel on-street parking, and landscaped parkways with the Village Pathway located on the north side of the street.

SECTION VIEW N'U RN SW RN 117 54 12 SIA MEDIAN 12' TRAVEL 10' LEFT , 4' TURN 6' WIPE CONCRETE PATHWAY 15' WIPE CONCRETE VOLLAGE PATTAWAY ar WITH 9' WIDE MUITT-PURPOSE PATH

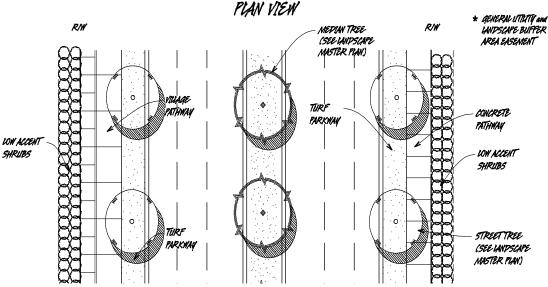


Exhibit 9
Secondary Village Entry

Portion of Santa Victoria Road (From Santa Diana Road to Heritage Road and from State Street to Santa Venetia Street) - Not to Scale

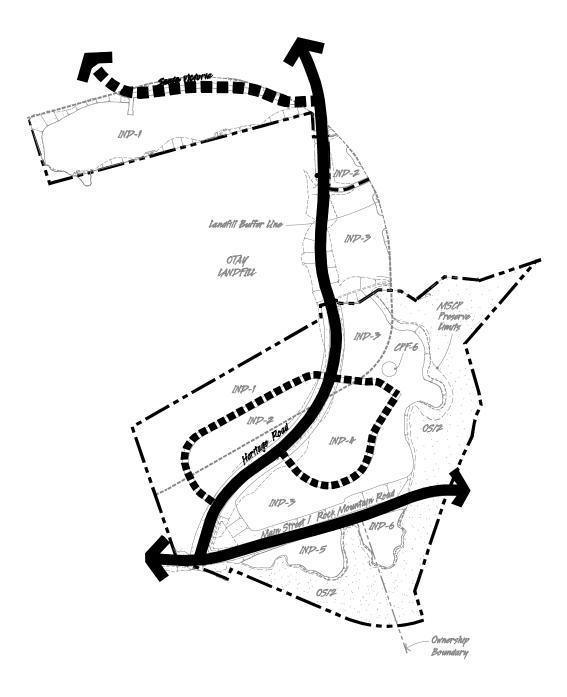
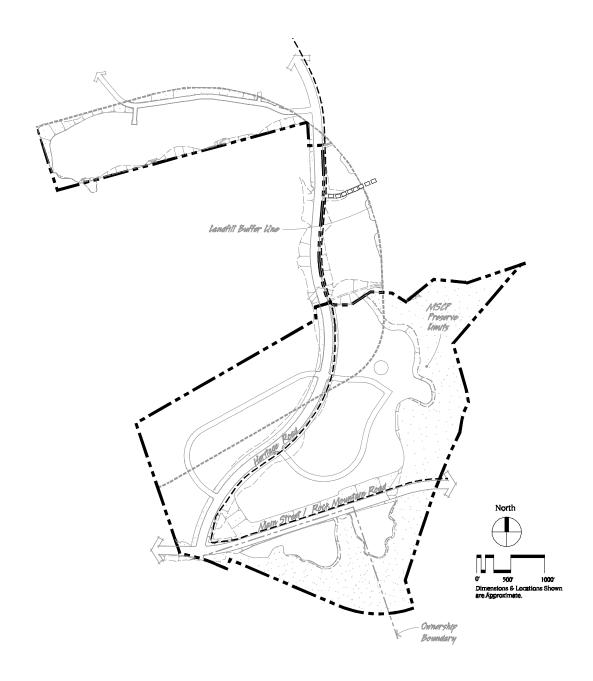




Exhibit 10

<u>Vehicular Circulation Plan</u>



LEGEND

- / REGIONAL TRAILS 10' SOFT PAVED SURFACE. / (ALONG ARTÉRIALS)
- PROMENADE G' and 8' PATHWAYS PAVED SURFACE.

Exhibit II

Non-Vehicular Circulation

3. Slopes

The Master Builder is responsible for implementing landscape on all project slopes. Slopes consist on internal manufactured slopes between development parcels, adjacent to streets and Wolf Canyon. The design of slopes within the development and along streets will provide an aesthetic enhancement to the development, define development sites, screen unattractive views, provide shade and slope stabilization. Slopes adjacent to Wolf Canyon will provide a transition between the development and natural preserve areas. The SPA Preserve Edge Plan provides additional detail about the design of the Wolf Canyon Slope. Exhibits 10 and 11 illustrate typical slope planting. Guidelines for slope design, erosion control and brush management are also provided. Plant lists for slopes are provided at the end of this section

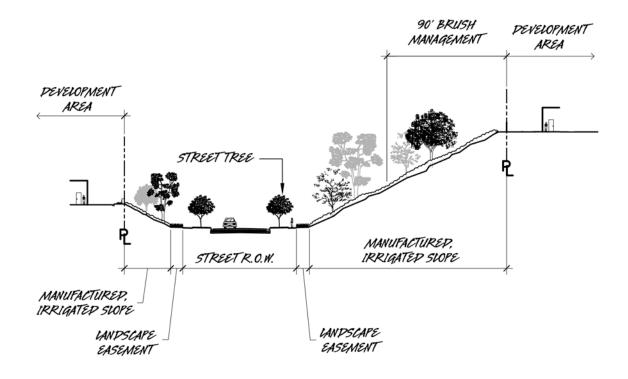


Exhibit 12 <u>Internal Slope landscape Concept</u> Heritage Road

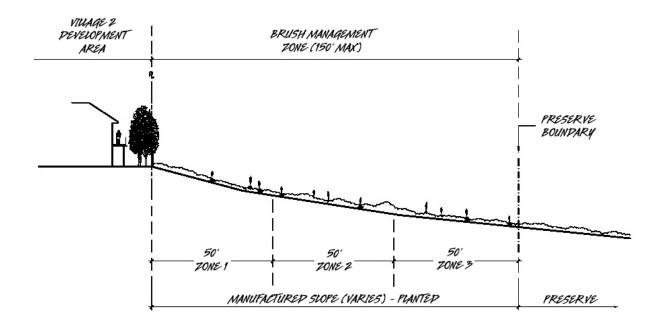


Exhibit 13 Wolf Canyon Slope Landscape Concept

4. Slope Design and Erosion Control

The following conditions shall be applied to all manufactured slopes:

- Erosion control shall be required for all graded areas to protect newly created slopes or denuded areas from erosion or unsightly appearance.
- Based on the surrounding setting and design intent of the area, compatible plant material should be informally grouped to stabilize and accent the slope.
- Slopes adjacent to Wolf Canyon shall be graded to blend with the natural contours. Slope planting shall consist of native and/or native compatible plant materials, pursuant to the requirements of the Fire Protection Plan; Otay Ranch Village 2, 3 and a Portion of 4 and the Preserve Edge Plan.
- Manufactured slopes along Heritage Road shall be planted to reinforce the Otay Ranch design theme.
- Slopes located within the development area shall be planted to provide vertical interest and buffer adjacent uses.

- Permanent, interior slopes shall be planted with a mixture of compatible, drought tolerant species and shall have a permanent automatic irrigation system.
- Individual development sites shall have permanent plantings and irrigation systems.
- Where necessary, cut slopes shall be serrated to aid in plant revegetation and help retard erosion.

5. Brush Management/Fuel Modification

Brush management/fuel modification is required where development abuts native areas adjacent to Wolf Canyon. The fuel modification zone has been incorporated into the proposed development areas pursuant to the requirements of the Chula Vista MSCP Subarea Plan. No fuel modification activities will occur within Preserve areas. Where appropriate, graded landscaped slope areas will be maintained pursuant to Fire Protection Plan requirements and will be outside of the Preserve.

Where the edge condition involves streets and/or front yard areas adjacent to Preserve areas, hard surface and irrigated landscaped areas may be included within the Brush Management Zone, in accordance with any specific requirements of the Fire Department.

6. Buffer Zone (Industrial/Residential)

Description:

The interface between single family residential and industrial land occurs along the western boundary of Village Two and within Village Two West. Through a combination of low berms, trees and potential walls, the homes in these areas are buffered from industrial uses. In some cases, residential or secondary village entry streets provide additional separation between these uses.

Plant Palette:

Trees:

Platens racemosa (California Sycamore) Rhus lancea (African Sumac) Tristania conferta (Brisbane Box)

Shrubs:

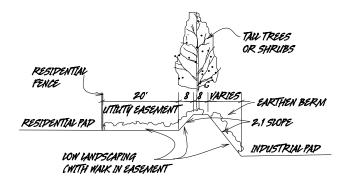
Ceanothus species (Wild Lilac)
Cistus species (Rockrose)
Heteromeles arbutifolia (Toyon)
Rhus integrefolia (Lemonade Berry)
Rhus ovata (Sugarbush)

Groundcovers: Ceanothus gloriosus 'Anchor Bay' (Spreading Wild Lilac)

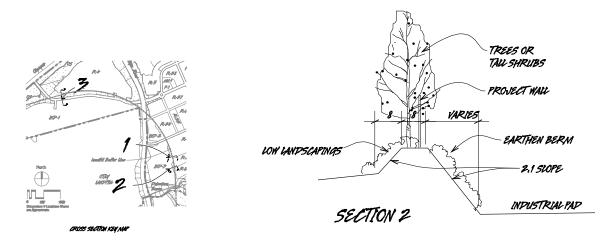
Cistus 'Sunset' (Spreading Rockrose)

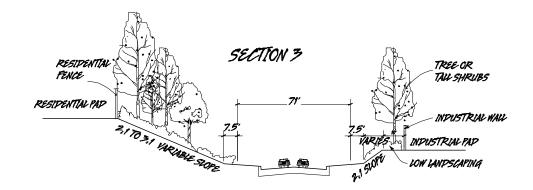
Gazania rigens (Gazania)

Myoporum parvifolium 'Putah Creek' (Dwarf Myoporum) Rosmarinus officinalis 'Huntington Carpet' (Spreading Rosemary)



SECTION 1





7. Irrigation

Landscape and irrigation installation shall conform to the City of Chula Vista Landscape Manual. Standard details will be followed to assure uniformity and a high quality of materials and construction. The following general irrigation concepts shall be considered in the design and installation of irrigation systems.

Sprinkler systems shall be circuited according to the following criteria:

- Provide 100 percent coverage
- Zone separately to top, toe and center of slope
- Contour along slope, where possible
- Zone separately to north/east and south/west exposures
- Zone for different plant water requirements
- Different root depth zones
- Irrigation shall be permanent, below ground and automatically controlled for adequate establishment of plant material.
- Temporary irrigation may be used in certain situations, such as slopes planted with native species adjacent to Wolf Canyon.
- Irrigation systems shall be installed as soon as possible after grading, and prior to amending soils, plant installation or any hydroseeding.
- Pop-up operation type sprinkler heads shall be used adjacent to all walks, drives, curbs, parking areas and public rights-of-way to avoid breakage and reduce maintenance costs.
- Irrigation sprinkler heads used to water slopes shall have application rates which reduce the amount of run-off and shall be of a type, such as stream rotors, which do not apply water in a fixed, steady stream.
- Sprinklers with proper nozzles shall be selected to compatibly provide water to their landscape. Soil information shall be obtained prior to the design of any irrigation system.
- Trees shall be irrigated with bubbler systems.
- As it becomes available, recycled water is proposed to be used for all commonly maintained slopes, parks, public rights-of-way

including landscape buffer easements and landscaped areas of commercial and industrial sites.

- Proper irrigation techniques shall be used throughout the village to maximize efficient water usage.
- The first 50' of the Brush Management Zone (adjacent to Wolf Canyon) may be permanently irrigated.
- Temporary above ground irrigation may be used outside the first 50' of the Brush Management Zone to assist with plant establishment and ensure slope stability subject to approval of the Director of Planning and Building.
- Temporary irrigation system removal program subject to approval of the Director of Planning and Building.

8. Plant Palettes

The following plant lists have been selected to complement the village design. This plant palette is not intended to be all-inclusive or restrictive and is subject to approval by the Fire Department. Street tree species are subject to approval by the Department of General Services, Landscape Division and the Department of Public Works.

Village Entry

Accent Tree: Pinus Eldarica (Afghan Pine)

Village Entry Shrubs: Carex, sps. (Sedge)
Heritage Road / Main Street / Rock Mountain Road Tree:

Schinus molle (California Pepper)

Village Industrial

Street Tree: Fraxinus augustifolia 'Raywood' (Raywood Ash)

Interior Slope Trees: Hetermomeles arbutifolia (Toyon)

Rhus lancea (African Sumac)

Tristania conferta (Brisbane Box)

Interior Slope Shrubs: California Sagebrush (Artemesia 'Canyon Grey')

Cistus species (Rockrose)

Rhus integrifolia (Lemonade Berry)

Rhus ovata (Sugarbush)

Wolf Canyon Slope: Shrubs:Heteromeles arbutifolia (Toyon)*

Isomeris arborea (Bladderpod)*

Lycium andersonii (no common name)*

Prunis ilicifolia (Hollyleaf Cherry)*

Wolf Canyon Slope: Rhamnus crocea (Redberry)*

Ribes speciosum (Fuchsia flowering gooseberry)*

Simmondsia chinensis (Goatnut)*

Encelia californica (Bush Sunflower)

Eriophyllum confertiflorum (Golden Yarrow)

Hemizonia fasciculate (Common Tarplant)

Lupinus succulentus (Arroyo Lupine)

Nassella pulchra (Purple Needlegrass)

Sisyrinchium bellum (Blue eyed grass)

Opuntia prolifera (Coast cholla)

Opuntia littoralis (Coast prickly pear)

Opuntia oricola (no common name)

Cylindropuntia californica var. californica (Snake cholla)

Yucca schidigera (Mohave yucca)

Distichlis spicata (Salt grass)

Yucca whipplei (Our Lord's candle)

Viguiera laciniata (San Diego sunflower)

*Containers only, others can be hydroseeded

C. SITE ELEMENTS

I. Signage

The Master Developer will be responsible for implementation of project entry monument signs located on Heritage Road. The Master Developer will also provide appropriate street signs in the public right-of-way as identified on the street improvement plans by the City Engineering Department.

The project entry monument will be integrated into the overall Otay Ranch design theme through the use of similar forms, materials and colors. Monumentation signage shall adhere to the following guidelines:

- The sign location shall conform to all City requirements for sight lines and sidewalk clearance.
- The maximum sign dimensions shall be thirty (30) square feet.
- The copy area shall not exceed fifteen (15) square feet.
- Text and logos must fit proportionally into the face of the sign.
- Signs may be externally illuminated by ground level lights.

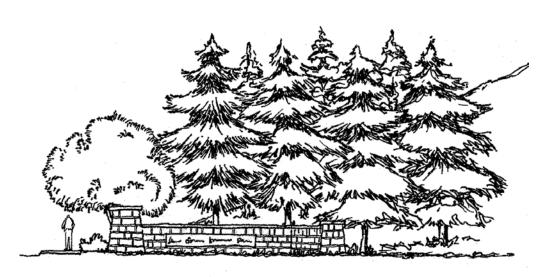


Exhibit 14 Conceptual Entry Monument Conceptual design for the monument sign

2. Lighting

The Master Developer will implement street lighting as a component of the construction of Heritage Road and the Village Industrial Streets. The street lighting will adhere to the following guidelines:

- The lighting fixtures will be in conformance with Otay Ranch and the City of Chula Vista design requirements.
- Shielded fixtures with well-defined cut-off limits shall be used where necessary to confine illumination.

Lighting adjacent to the Wolf Canyon natural preserve area shall be in conformance with the project Preserve Edge Plan. Exhibits 15 and 16 illustrate the street lighting concepts.

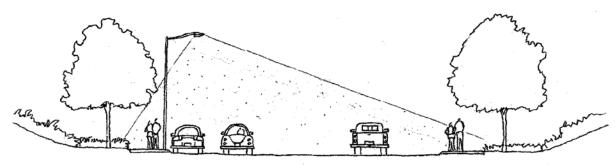


Exhibit 15
Lighting - Industrial Street

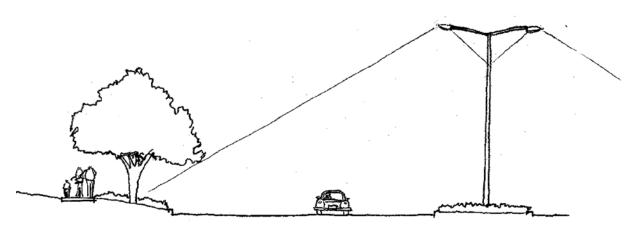
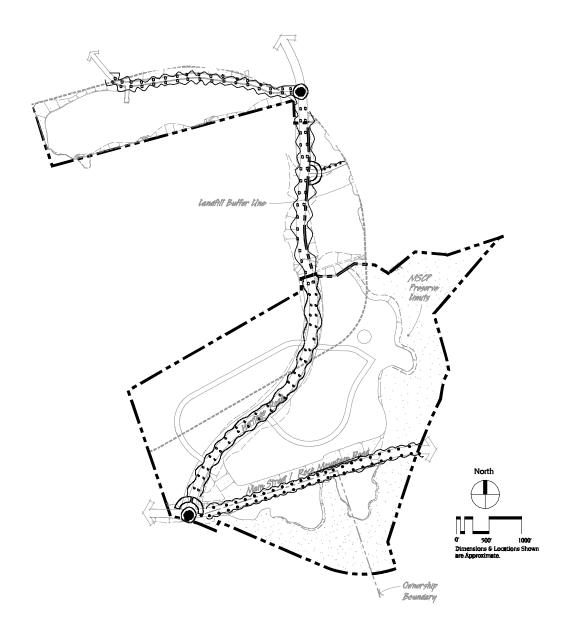


Exhibit 16 <u>Heritage Road Lighting Concept</u>



LEGEND









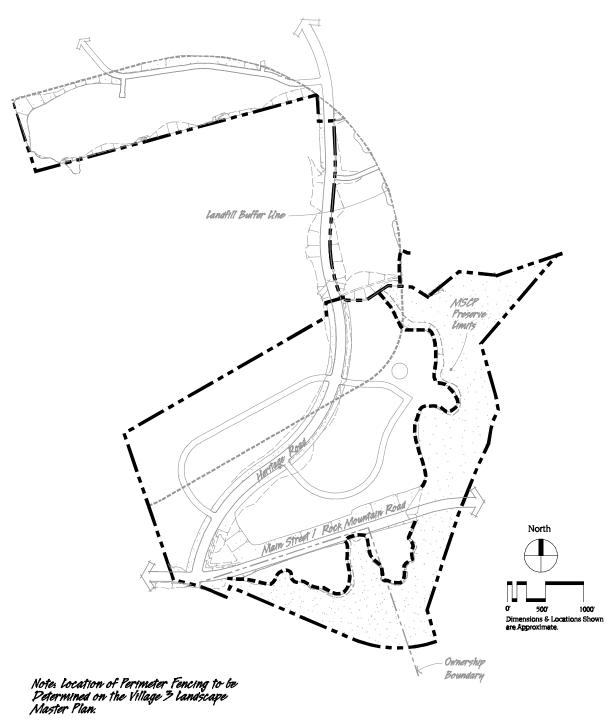
NILLAGE ENTRY

Exhibit 17
Lighting Concept Plan

3. Walls & Fencing

Walls and fencing will be designed to integrate the plan area into the overall Otay Ranch community. The walls and fencing will unify the development as a common design element. The primary functions of the walls and fencing are to provide security, screening and noise attenuation. The Master Developer will implement perimeter walls and fencing at the project perimeters. Exact location of perimeter fencing to be determined at the Precise Plan level to meet Preserve edge requirements. The location and design of noise attenuation walls shall comply with subsequent acoustical analysis studies. View fencing may be used to create an open, welcoming image wherever noise attenuation or visual screening are not needed. The precise type of fencings will be determined when final grading and acoustical studies have been completed. The exact materials shall be selected concurrent with development of the Project Master Plan. Exhibits 17 and 18 provide a conceptual design for walls and fencing. The following are guidelines for wall and fencing design:

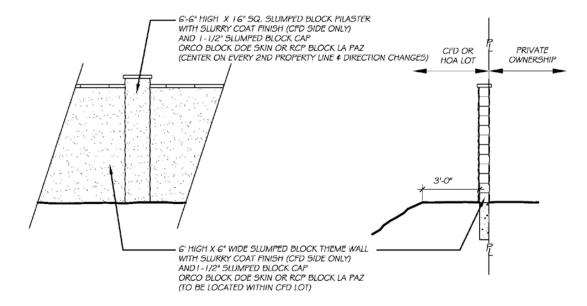
- Walls shall be made of a textured surface material that is compatible with the Otay Ranch theme.
- Walls and fences should complement the project's architecture.
- Walls and fences within front and exterior side yards of commercial sites should be avoided.
- Unless walls are required for screening or security purposes they should be avoided.
- Security fencing should incorporate solid pilasters, or short solid wall segments and view fencing.
- Gates should be provided in walls or fences where necessary to allow for emergency access.
- Long expanses of walls should incorporate recesses, offsets, pilasters or similar measures to avoid monotony.
- Trees, shrubs and vines should be used to soften the appearance of walls and fences.
- Wall and fencing heights shall be eight and one-half (8-1/2) feet from the highest finished grade unless additional height is required for noise attenuation.
- Graffiti control finishes shall be applied where appropriate.
- Chain link fences should not be visible from streets.
- High perimeter walls and walls topped with barbed wire or razor wire are strongly discouraged.



LEGEND

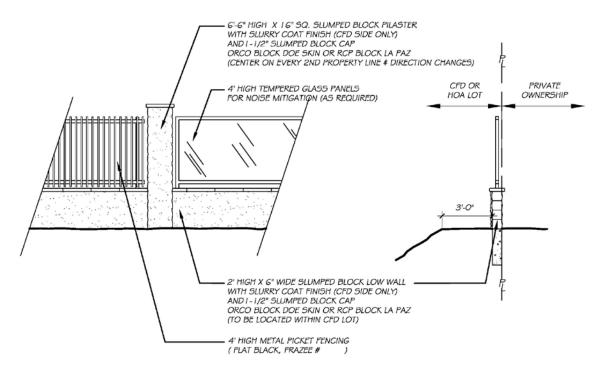
---- COMMUNITY THEME VIEW WAW - OPEN VIEW WITH METAV PICKET OF GIASS PER SOUND OR FUEV MODIFICATION REQIMES

Exhibit 18
<u>Wall and Fencing Concept Plan</u>



Community Enhanced Theme Wall

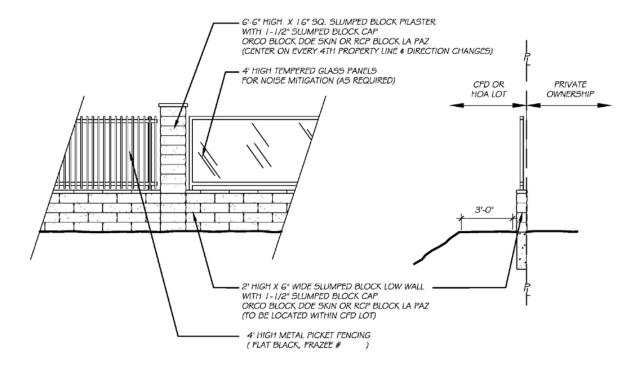
Note: 6' high metal picket fencing maybe used where appropriate to preserve views.



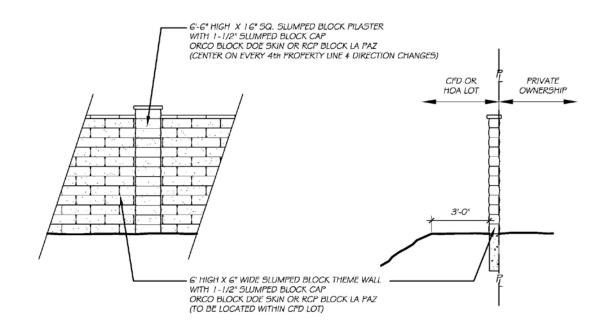
Community Enhanced Theme View Wall

Exhibit 19

Conceptual Pesign for Walls & Fencing



Community Theme View Wall



Community Theme Wall

Exhibit 20 Conceptual Design for Walls & Fencing

D. MAINTENANCE STANDARDS

The developer will be responsible for site element and landscape maintenance during project implementation. Ultimate responsibility for maintenance will belong to individual private property owners, Community Facilities District, Business Associations and public agencies. Definition of these responsibilities will occur during the subdivision review process. The following summarizes how landscape maintenance responsibilities are intended to be divided within the village.

1. Individual Private Property Owner Maintenance

The individual property owner will be responsible for maintenance within privately owned areas.

2. Community Facilities District and Business Association

Areas not maintained by private property owners or a public agency will be maintained through Community Facilities Districts (CFD) and Business Associations. Such areas will include common areas, common slope areas, common open space, entry landscaping and walls facing the public right-of-way. Certain public landscaped areas may also be included, as determined by the Director of Public Works, such as detention basins and enhanced median and parkway landscaping in the public right-of-way.

3. Public Agency Maintenance

Public agencies will be responsible for maintenance on publicly owned land. These areas include landscaping within street and highway rights-of-way (unless maintained by a business association or a community facilities district), Wolf Canyon Preserve and other similar public lands.

4. Public Works Department

Public streets, walks, parkways and trails which are located on public land and drainage structures other than those designed as swales or brow ditches will be the maintenance responsibility of the Public Works Department (unless maintained by a business association, a community facilities district or individual property owners).

III. Project Pesign Guidelines

The following guidelines are intended to direct the individual project developer. The objective of these guidelines is to create projects that contribute to the overall design continuity of the business park while maintaining their own individuality. Guidelines are provided for site planning, architecture, landscaping, signage and lighting.

A. SITE DESIGN GUIDELINES

The SPA Planned Community (PC) District Regulations contain development standards, including allowable lot areas, setbacks, building heights and parking requirements. The following guidelines are intended to address additional practical and aesthetic considerations of site design:

1. Compatibility

- The arrangement of structures, parking and the internal street system should recognize the site characteristics and should relate to the surrounding built environment in pattern, function, scale, character, and materials.
- Residential uses should be buffered from incompatible industrial development. Intensified landscaping and appropriate setbacks and building orientation should be utilized to provide adequate separate between land uses.

2. Site Entry Design

 Entry areas to industrial developments should be enhanced by ornamental landscaping, low profile monument signage and decorative paving.

3. Building Siting

- Building siting should consider the context of the entire industrial development, the location of compatible uses, the location of major traffic generators as well as site characteristics.
- The placement and design of structures should foster pedestrian access and circulation.
- Industrial site design should provide:
 - convenient public access and visitor parking
 - service areas located at the sides and rear of buildings
 - screening of storage, work areas, and mechanical equipment
 - storage and service area screen walls, as required

- Site buildings along industrial frontages, to the greatest extent possible. Provide variable building setbacks in order to avoid long monotonous building facades and create an interesting street scene.
- Whenever possible, new structures should be clustered to create plazas and courtyards.

4. Vehicular Access/Circulation/Parking

- Site access and internal circulation should promote safety, efficiency and convenience. Conflicts between vehicles and pedestrians should be avoided. Continuous circulation should be provided throughout the site to the greatest extent possible. Deadend driveways should be minimized. Adequate areas for maneuvering, stacking, truck staging, and loading and emergency vehicle access should be accommodated on site.
- The number of site access points should be minimized and located as far as possible from street intersections. The use of common or shared driveways is encouraged and in some cases may be required. Designs which encourage the use of streets for "internal circulation" should be avoided.
- Driveway entry locations should be coordinated with existing or planned median openings and driveways on the opposite side of the street.
- Loading and service areas should be provided with separate access and circulation whenever possible.
- Parking should not dominate street frontages. Parking areas should be screened by buildings and landscaping.
- Parking lots which accommodate a significant number of vehicles should be divided into a series of connected smaller lots.

5. Pedestrian Circulation

- Placement of primary vehicle access points to the project site in close proximity to major building entries should be avoided in order to minimize pedestrian and vehicular conflicts.
- Clearly defined pedestrian paths should be provided from parking areas to primary building entrances and sidewalks along the site's perimeter.
- Design parking areas so that pedestrians walk parallel to moving cars. Minimize the need for pedestrians to cross parking aisles and landscape islands to reach building entries.
- Pedestrian walkways should be accessible, safe, visually attractive and well defined by decorative pavement, landscaping, low walls and low-level lighting.

- Safe and convenient pedestrian walkways should be provided between buildings and parking areas.
- Pedestrian access should be provided between transit stops and building entrances.

6. Plazas/Courtyards and Passive Recreational Areas

- Building placement that creates opportunities for plazas, courtyards, patios or outdoor dining areas is strongly encouraged.
- Shade trees or architectural elements which provide shelter and relief from direct sunlight should be provided within plazas and courtyards.
- Landscaping, water features and public areas should be incorporated into plaza and courtyard design.

7. Public Safety Through Design

- Electronic surveillance and security hardware should be as invisible and unobtrusive as possible. If security grilles are necessary, they should be architecturally integrated within the overall building design theme. The use of scissor grilles is strongly discouraged.
- Lighting should be designed to satisfy functional and decorative needs. Security lighting should be designed as part of the overall lighting plan rather than a single stand-alone element.
- Safety behind buildings should be ensured through: 1) adequate security lighting for parking areas and pedestrian ways; 2) limited access (walls, fences, gates, shrubs); 3) signage; 4) introduction of activities (e.g., rear entrances for commercial activities) that increase surveillance; 5) surveillance through windows or with cameras; and 6) ongoing maintenance of storage areas and alleys.
- Building lighting should complement the architectural style of the building while providing illumination of building facades and entrances.
- Lighting should be sufficient for sidewalk and street illumination.
- Building address numbers should be visible from the public right-ofway.
- Landscaping should be planted and maintained to allow visibility and eliminate areas of potential criminal activity.
- Delineate the separation between public and private spaces with paving, building materials, grade separations or with physical barriers such as landscaping.

B. ARCHITECTURAL DESIGN GUIDELINES

The goal of building design guidelines is to create a consistent, harmonious business park, while allowing for variety and project individuality. Design continuity can be created by sensitive location and massing of structures and a limited palette of building materials and colors.

I. Building Design

While there is no specific architectural style, detail, form, and materials requirement, each property owner is encouraged to work within the context of the Otay Ranch Community, adjacent properties, and individual site in establishing an architectural expression for their property.

Since the specific characteristics of each site vary widely, the Design Review Committee will, in evaluating proposed improvements, seek to determine that the unique constraints and opportunities have been given adequate consideration.

- All buildings shall be designed by an architect registered in the State of California and bear his or her seal when submitted for design review.
- Special architectural attention shall be given to building elevations facing open space areas.
- No mechanical equipment or vent shall be placed on the exterior surface of any building wall that can be viewed from a public street.
- No particular architectural style is required for industrial development. However, the architectural style shall be compatible with adjacent uses. High quality, innovative and imaginative architecture is encouraged.
- The selected architectural style/design should consider compatibility with surrounding character, including harmonious building style, form, size, color, materials and rooflines.
- The architect is expected to utilize variations in form, building details and siting in order to create visual interest. In all cases, the selected architectural style should be employed on all building elevations.
- A unified, identifiable image should be projected by individual buildings within the industrial/business parks through the use of similar and/or complementary colors, materials, roof forms, signage, decorative pavement and architectural style.
- Buildings should be segmented in distinct massing elements. Building facades should be articulated with architectural elements and details. Vertical and horizontal offsets should be provided to minimize building bulk.

- Variable building elevations along linear street frontages are encouraged. Building entries should be readily identifiable. Use recesses projections, columns and distinctive materials and colors to articulate entrances.
- Employ various building forms to create visual character and interest.
- Long (over 100') unarticulated building facades are not acceptable. Varied front setbacks are encouraged.
- All wall surfaces visible to the public should be architecturally enhanced. Front and side wall elevations should provide building offsets and architectural details.
- Varying building heights/massing and setbacks to define different functions such as offices and warehousing is encouraged.
- Vertical architectural elements such as towers should be used as focal points.
- Stairways should be designed as an integral part of the building architecture.
- Roof design should be an integral component of the overall building architecture. Long continuous rooflines are not acceptable. Multiple roof planes and offsets are encouraged.
- Gutters and downspouts should be concealed, unless designed as a decorative architectural feature.
- The size and location of doors and windows should relate to the scale and proportions of the building elevation on which they are located.

2. Materials and Colors

Materials and colors should be used to create visual interest. When buildings are located within an industrial/business park, utilize colors and materials on individual buildings which are complementary to the design theme and consistent with the color/materials palette for the overall industrial/business park development.

The following materials are permitted:

- *Tilt-up* concrete with textures and colors.
- Masonry Block with textured surface.
- Steel frame with glass or masonry and glass exterior (glass shall not exceed 70% of the exterior)

• Enameled metal panels, wood, glass and stucco may be used as decorative elements with tilt-up or masonry building system.

- Tile, brick and stone accents.
- Sloped roof materials may be ribbed metal, clay or concrete tile.
- Exposed gutters should be colored to match fascia or wall materials.
 Exposed downspouts should be colored to match the surface to which they are attached.
- Use various types of building cladding to produce different textures, shade and shadow effects.
- Materials should be chosen to withstand abuse by vandals or accidental damage by machinery. False facades and other simulated materials and ornamentation are discouraged.

The following materials are prohibited:

• Sheet or corrugated metal, asbestos or similar materials used on exterior walls.

The following color selection guidelines should be utilized:

- Colors shall be limited to a maximum number of three, exclusive of minor trim elements.
- Colors shall be coordinated with materials and finishes on all exterior building elevations to achieve a total continuity of design.
- The predominant building color shall be light neutral, earth tone or pastel colors such as off-white, warm gray or beige.
- Accent colors may be darker tones of the main building color.
 Limited use of bold, bright colors, black, white or metallic may be used for accents.
- Colors should be compatible with the surrounding business park.
- Vents, louvers, exposed flashing, tanks, stacks, ductwork, overhead, rolling and service doors are to be painted.
- All screens shall be painted a neutral color or a color consistent with the building color scheme.
- Lightning protection devices shall be painted a neutral color that blends into the skyline.
- Brightly-colored buildings are discouraged.

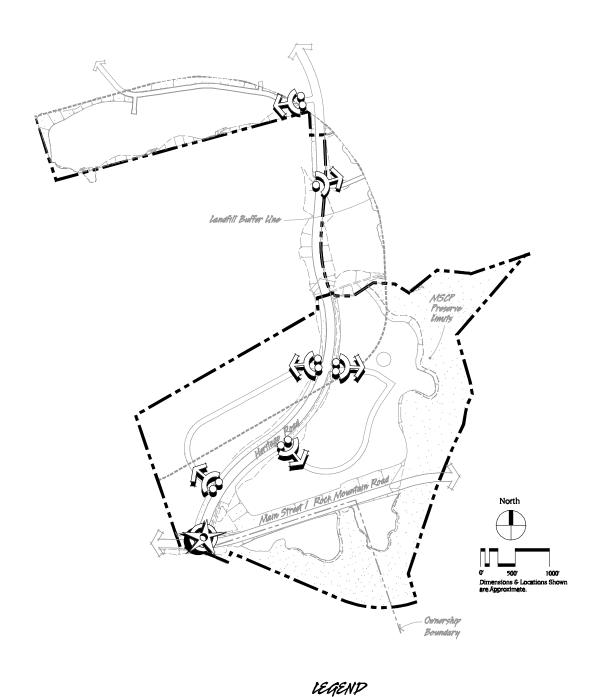




Exhibit 21 Entry Identity Locations

3. Lighting

a. General:

- All site, landscape and building exterior lighting shall be of a configuration, style and finish color that compliments the architectural theme and materials established by the building architecture.
- Shielded fixtures with well-defined cut-off limits shall be used where necessary to confine illumination to on-site areas only.
- Lighting adjacent to the Wolf Canyon natural preserve area shall be in conformance with the project Preserve Edge Plan.
- Lighting shall be primarily for site function and security to conserve energy, support astronomical dark skies and avoid nuisance lighting.

b. Accent Lighting:

- Accent lighting may be used if it contributes to the overall site functional and security lighting program.
- Architectural lighting shall be integrated into building design.
- Architectural accent lighting shall originate from concealed or inconspicuous source locations.
- Accent lighting may be low-pressure sodium or mercury vapor; no color lights shall be used.
- Walkway and landscape feature lighting are encouraged as necessary or desirable for both aesthetic and security purposes.
- Pedestrian scale/decorative light fixtures are encouraged within plazas and courtyards.

c. Security Lighting:

- Wall mounted security light pack to be used only at rear and interior side of buildings.
- Security lighting shall use low-pressure sodium fixtures.

d. Parking and Service Yards Lighting:

- Lighting for parking and service yards shall be shielded low-pressure sodium directed downward, and have zero cut off.
- Fixtures shall be pole mounted, twenty-five (25) foot maximum height and located above paved surfaces.

4. Screening

• Dense landscape screening shall be used between pad elevations to minimize views of rooftops from adjacent streets and buildings.

- Dense landscape screening shall be used to minimize views of architecture, loading areas, and vehicular use areas from the Wolf Canyon and adjacent open space area viewsheds.
- Telephone, electric service and other utilities shall be located to be unobtrusive and screened by decorative walls and landscaping to the extent allowed by utility providers.
- All loading areas shall orient away from front primary elevations (street or side with street frontage). In no case shall these facilities be visible from any off-site location. Screening may be accomplished with solid walls, landform grading and landscaping.

5. Walls & Fencing

- All fencing or walls shall provide a sight clearance distance as required by the City.
- Fences and walls shall be designed to be compatible with on-site buildings in terms of color and/or materials.
- Solid fences may be constructed of wood, brick, decorative block and stone or framed stucco with decorative metal.
- Open style fencing shall be constructed of wood, ornamental iron or other similar decorative material.
- Open style fences shall be landscaped with vines, shrubs and /or trees to soften the appearance.
- The use of vinyl coated chain link is only permitted along interior side and rear property lines where not visible from the public rightof-way.
- Chain link, barbed wire, concertina wire or similar security devices are discouraged and are not acceptable in view of the public rightof-way.
- All gates shall be constructed of solid view-obscuring material except vehicular gates.

6. Hardscape

- Walkways, plazas, building entries and similar paved areas shall be designed with materials and colors that are compatible with the project architecture.
- Paving materials should complement the architectural design. The use of stamped concrete, stone, brick, pavers, exposed aggregate or colored concrete is encouraged.
- Raised planters, curbs and walkways of appropriate paving materials shall be used to define and protect landscape areas.

- Outdoor plaza and seating areas are encouraged to be provided for employee use during lunch and break periods.
- All pedestrian areas shall be designed for comfortable use, security and accessibility.
- Boulders, gravel, decomposed granite, pavers and similar materials may be incorporated into the landscape design as a water conservation measure.
- Street furniture, benches, mailboxes and seat/walls shall be integrated into the overall project design and be compatible in style, materials and colors.

C. LANDSCAPING

I. General

- These guidelines shall be used in conjunction with the Otay Ranch Overall Design Guidelines, the city of Chula Vista Design Manual and Landscape Manual, as well as the appropriate Federal, State, and County codes.
- All landscape and irrigation plans shall be prepared by a licensed California landscape architect and shall be submitted to the City of Chula Vista, and to the Master Developer for review and approval prior to the start of construction. All submissions shall demonstrate compliance with these guidelines.
- Landscaping should define entrances to buildings and parking lots, buffer incompatible uses and screen outdoor storage, loading and equipment areas.
- Landscaping should be in scale with adjacent buildings and of an appropriate size and maturity to accomplish its intended purpose.
- Utilize grade differential and/or berming in conjunction with landscaping to reduce the appearance of building mass and height along street frontages.
- When industrial uses are located adjacent to less intense uses, additional setbacks, walls, screening and/or landscaping should be provided to mitigate potential adverse effects to neighboring properties.
- Landscaped areas should generally incorporate planting materials utilizing a three tiered system: 1) grasses and ground cover; 2) shrubs and vines; and 3) trees.
- All areas not covered by structures, service yards, walkways, driveways and parking spaces should be landscaped, in accordance with City requirements.

The following design concepts should be utilized:

- Specimen trees in informal groupings or rows at major focal points.
- Use of flowering vines both on walls and arbors or trellises
- Use of planting to create shadow and patterns against walls
- Trees to create canopy and shade, especially in parking areas and passive open space areas
- Berms, plantings and walls to screen parking lots, trash enclosures, storage areas, utility boxes, etc.
- Landscaping shall be in conformance with the City's requirements for sight lines and access.
- Design continuity in the business park will be partially achieved through the use of an established plant palette for parking areas, areas between developments or "transition zones," and screening. A recommended plant palette is included at the end of this section.

a. Transition Zones:

- A uniform area of landscaping shall be located between project sites, planted with trees, shrubs and groundcovers.
- Transitions zones shall be designed to separate and identify individual developments and to provide screening and buffering between incompatible uses.

b. Screening:

- Screening to conceal unattractive views, such as trash enclosures and storage areas, shall be accomplished through the use of trees, vines, shrubs and earth berms in addition to walls and fences.
- Dense groves of trees and tall shrubs shall be used to provide screening and soften the appearance of walls and fences.

c. Parking Areas:

- Parking lot landscaping should accent driveways, frame the major circulation aisles and highlight pedestrian pathways.
- Parking areas should be planted with a grove pattern of trees.
 Trees should be planted in diamond planters between rows of parking spaces and along the end of parking rows.
- Parking lots will require submittal of landscape, planting and irrigation plans.

2. Irrigation

Landscape and irrigation installation shall conform to the City of Chula Vista Landscape Manual. Standard details will be followed to assure uniformity and a high quality of materials and construction. The following general irrigation concepts shall be considered in the design and installation of irrigation systems.

- Sprinkler systems shall be circuited according to the following criteria:
- Provide 100 percent coverage
- Zone separately to top, toe and center of slope
- Contour along slope, where possible
- Zone separately to north/east and south/west exposures
- Zone for different plant water requirements
- Different root depth zones
- Irrigation shall be permanent, below ground and automatically controlled for adequate establishment of plant material.
- Temporary irrigation may be used in certain situations, such as slopes planted with native species adjacent to Wolf Canyon. Any proposed removal program is subject to approval by Director of General Services and Public Works.
- Irrigation systems shall be installed as soon as possible after grading, and prior to amending soils, plant installation or any hydroseeding.
- Pop-up operation type sprinkler heads shall be used adjacent to all walks, drives, curbs, parking areas and public rights-of-way to avoid breakage and reduce maintenance costs.
- Irrigation sprinkler heads used to water slopes shall have application rates which reduce the amount of run-off and shall be of a type, such as stream rotors, which do not apply water in a fixed, steady stream.
- Sprinklers with proper nozzles shall be selected to compatibly provide water to their landscape. Soil information shall be obtained prior to the design of any irrigation system.
- Trees shall be irrigated with bubbler systems.
- As it becomes available, recycled water is proposed to be used for all commonly maintained slopes, parks and public rights-of-way

including landscape buffer easements and landscaped areas of commercial and industrial sites.

• Proper irrigation techniques shall be used throughout the village to maximize efficient water usage.

3. Plant Palettes

Interior Slope Trees: Hetermomeles arbutifolia (Toyon)

Rhus lancea (African Sumac)

Tristania conferta (Brisbane Box)

Interior Slope Shrubs: California Sagebrush (Artemesia 'Canyon Grey')

Cistus species (Rockrose)

Rhus integrifolia (Lemonade Berry)

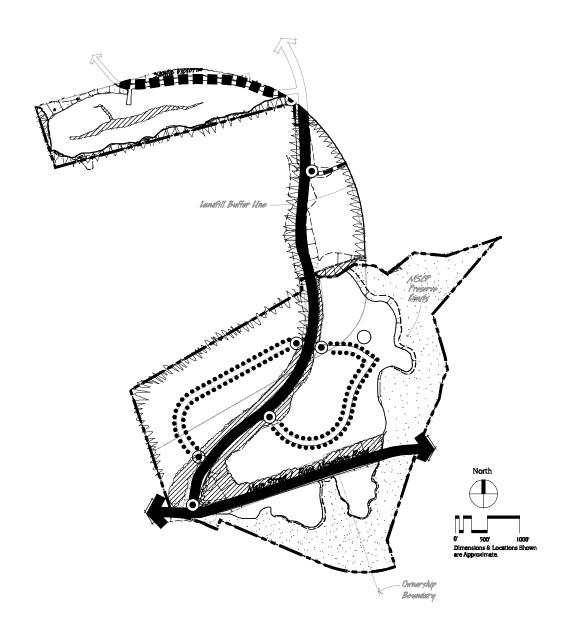
Rhus ovata (Sugarbush)

Parking Area Trees: Olea europea (Olive)

Pistachia chinensis (Pistache)

Podocarpus gracilior (Fern Pine)

Note: This plant palette is subject to Fire Department approval.



LEGENP



OPEN SPACE CHARACTER TRANSITION / BRUSH MANAGEMENT. OAK TOYON, PROUGHT TOVERANT MATERIAL (MANUTACTUREP SVOPES)



INTERIOR SUPES, PREPOMINANTLY EUCAUPTUS



BUFFER ZONES, PENSE PLANTINGS TO SCREEN VIEWS, EUCAMPTUS I PINE SPECIES

Exhibit 22

<u>landscape Tone Plan</u>



BUSINESS PARK STREET TREES



ENTRY FEATURE



ARTERIAL STREETSCAPE - CALIFORNIA PEPPERS



PLOATING OPF SITE

D. MAINTENANCE

I. Site

Maintenance of the common area of the business park will be the responsibility of the Master Developer until that responsibility is transferred to a CFD, business association or similar entity. Individual project developers are responsible for maintaining their development sites in a clean, debris and weed free condition with all equipment and materials confined and screened. Project site elements such as monument signs, walls, fences and lighting must be maintained in a functional and attractive condition.

2. Buildings

Individual project developers must maintain buildings and other improvements in good condition, adequately cleaned and painted or otherwise finished to present a sightly and well-kept appearance.

3. Landscape

Landscape maintenance requires keeping the landscape in a healthy and attractive appearance. This includes adequate irrigation, fertilization, pruning, replacement of dead or marginal plant material and removal of plant debris and trash. The irrigation system must be maintained to function efficiently.